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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/506,640	02/18/2000	Beat Laemmle	99P7475US01	8044

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EXAMINER

HO, THE T

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 05/07/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/506,640

Applicant(s)

LAEMMLE ET AL.

Examiner

The Thanh Ho

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the request for reconsideration filed 10/28/2003.
2. Claims 1-58 have been examined and are pending in the application.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 13-20, 25 and 51-58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The following terms lack antecedent basis:

- (i) "said running object table" (lines 7-8 claim 13; lines 9-10 claim 51).
- (ii) "said connection" (line 1 claim 25).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koppolu U.S Patent No. 6,460,058 in view of Bonet U.S Patent No. 6,564,242.

As to claim 1, Koppolu teaches a method for accessing (client binds to the object, lines 60-61 column 15) a specific instance (instance data structure of an object, lines 9-11 column 11), an operating system (Windows operating system, line 58 column 11), wherein said specific instance (instance data structure of an object, lines 9-11 column 11) is not registered with said operating system such that a server (the client program, line 10 column 13) of said operating system is not able to normally access said specific instance using a registration of said operating system (a request to bind to the distributed object from the client needs to go through a moniker object, lines 1024 column 13), wherein said specific instance (instance data structure of an object, lines 9-11 column 11) has specific parameters (data members or properties of the object, lines 13-14 column 11) that differentiate said specific instance from other instances, the method comprising determining that said specific instance is not registered (moniker looks in the running objects table of the bind context to determine whether the object already exists, lines 60-63 column 15) with the operating system; registering said specific instance with said operating system (creating the object if the object does not exist, lines 60-66 column 15) such that said specific instance is accessible by said server by checking said operation system's registration (moniker looks in the running objects table of the bind context to determine whether the object already exists; if the object exists, the moniker can simply return an interface pointer of the existing object to

the client, lines 60-66 column 15). Koppolu does not explicitly teach the specific instance is associated with a programmable logic controller.

Bonet teaches a distributed automation system (Fig. 1; lines 41-53 column 1) having specific instance (lines 47-56 column 3) associated with programmable logic controllers (line 19 column 2) coupled to an operating system (Java real time operating system, line 41 column 2). It would have been obvious to apply the teachings of Bonet to the system of Koppolu because the specific instance of Koppolu could be associated with a programmable logic controller wherein this specific instance is being used by the client program to control the operation of a distributed automation system as disclosed by Bonet (lines 41-53 column 1).

As to claim 2, Koppolu as modified further teaches registering does not register objects that are not running (254-259, Fig. 8A).

As to claim 3, Koppolu as modified further teaches remotely coupling the programmable logic controller to the operating system (54 and 56, Fig. 2).

As to claim 4, Koppolu as modified further teaches remotely coupling over the Internet (internet 52, Fig. 2).

As to claim 5, Koppolu as modified further teaches obtaining an object name (142, Fig. 5; bind to the object referenced by a name, lines 3-5 column 16) associated with the specific instance from a memory location (memory of server 100, Fig. 5) allocated for the programmable logic controller.

As to claim 6, Koppolu as modified further teaches parsing a display name (display name which remains to be parsed, lines 61-62 column 51) of the object to generate a parsed display name (parsing into a new moniker, lines 63-64 column 51).

As to claim 7, Koppolu as modified further teaches creating a pointer moniker using the parsed display name (become the current moniker, line 67 column 51).

As to claim 8, Koppolu as modified further teaches binding the pointer moniker to server (Fig. 4).

As to claim 9, Koppolu as modified further teaches creating an item moniker using a portion of the parsed display name (combines into a composite moniker, line 6 column 52) to the right of a part corresponding to the pointer moniker (lines 3-13 column 52).

As to claim 10, Koppolu as modified further teaches binding the item moniker to server (Fig. 4).

As to claim 11, Koppolu as modified further teaches recursively creating item monikers for items (each successive moniker is able to parse a next more specific portion of the display name into a moniker, lines 7-8 column 52).

As to claim 12, Koppolu as modified further teaches binding a leftmost portion resulting monikers to server (Fig. 5).

As to claim 13, it is a method claim of claims 1-3. Therefore, it is rejected for the same reasons as claims 1-3 above. Koppolu as modified further teaches a running object table (running object table 253, Fig. 8A, line 62 column 15).

As to claim 14, Koppolu as modified further teaches converting a program ID to obtain a class ID (lines 16-32 column 52).

As to claims 15-17, they are method claims of claims 6-8, respectively. Therefore, they are rejected for the same reasons as claims 6-8 above.

As to claim 18, Koppolu as modified further teaches instantiating the specific instance (instantiating the named object, lines 42-43 column 31) using the pointer moniker (asynchronous moniker, line 44 column 31).

As to claim 19, Koppolu as modified further teaches registering the specific instance without changing a tagfile server name (line 58 column 51 to line 13 column 52).

As to claim 20, Koppolu as modified further teaches binding a pointer moniker to a client (Fig. 5).

As to claim 21, it is an apparatus claim of claims 1-3. Therefore, it is rejected for the same reasons as claims 1-2 above. Koppolu further teaches a memory and a processor (40 and 22, Fig. 1).

As to claims 22-23, they are apparatus claims of claims 3-4, respectively. Therefore, they are rejected for the same reasons as claims 3-4 above.

As to claims 24 and 25, Koppolu does not explicitly disclose USB and COM connections. However, Koppolu as modified further teaches that other physical connections to the computer network alternatively can be used (lines 38-40 column 8). It would have been obvious to consider that these physical connections could be USB or COM since such teachings are conventional.

As to claim 26, Koppolu as modified further teaches a dynamic link library (dynamic link library, line 56 column 11).

As to claim 27, Koppolu as modified further teaches a display (30, Fig. 1).

As to claim 28, Koppolu as modified further teaches transforming signals into signals of a predetermined format for display on the display (lines 6-22 column 8).

As to claim 29, Koppolu as modified further teaches a PC (Fig. 1).

As to claim 30, it is an apparatus claim of claim 3. Therefore, it is rejected for the same reasons as claim 3 above.

As to claim 31, Bonet further teaches a plurality of programmable logic controllers (API-1 to API-4, Fig. 1).

As to claim 32, Bonet further teaches a connection between plurality of programmable logic controllers (connections between programmable logic controllers API-1 to API-4, Fig. 1) thereby forming a master-slave relationship in which a master programmable logic controller directs control of machinery coupled to a slave programmable logic controller (lines 29-39 column 2).

As to claim 33, Koppolu as modified further teaches a firmware (adapter card, line 43 column 8).

As to claim 34, Koppolu as modified further teaches the firmware provides identification information for registering the specific instance (lines 36-49 column 8).

As to claim 35, Koppolu as modified further teaches a personal computer card (adapter card, line 43 column 8).

As to claims 36-50, they are apparatus claims of claims 21-35, respectively.

Therefore, they are rejected for the same reasons as claims 21-35 above.

As to claim 51, it is an article of manufacture claim of claims 13 and 21.

Therefore, it is rejected for the same reasons as claims 13 and 21 above.

As to claims 52-58, they are article of manufacture claims of claims 14, 6-8 and 18-20, respectively. Therefore, they are rejected for the same reasons as claims 14, 6-8 and 18-20 above.

Response to Arguments

5. Applicant's arguments filed have been fully considered but are moot in view of the new ground(s) rejection.

Applicant's arguments presented issues which required the Examiner to further view the previous rejection. The Examiner conducted a further search regarding the issues mentioned in Applicant's response. Therefore, all arguments regarding the cited references of the previous rejection are moot in view of the new grounds of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to The Thanh Ho whose telephone number is 703-306-5540. A voice mail service is also available for this number. The examiner can normally be reached on Monday – Friday, 8:30 am – 5:00 pm.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Any response to this action should be mailed to:

Commissioner for Patents

P.O Box 1450

Alexandria, VA 22313-1450

Or fax to:

- AFTER-FINAL faxes must be signed and sent to (703) 746 – 7238
- OFFICAL faxes must be signed and sent to (703) 746 – 7239
- NON OFFICAL faxes should not be signed, please send to (703) 746 – 7240

TTH
April 30, 2004



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